

IN THE CLAIMS

1. A surface panel having a major dimension, a minor dimension and a thickness dimension, a side edge of said panel corresponding to said thickness dimension, a face surface of said panel facing toward a room and being substantially coplanar with a plane defined by said major and minor dimensions, a back surface of said panel being opposite of said face surface,

wherein each side edge is multifaceted and includes:

a first surface intersecting said back surface;

a second surface intersecting said first surface and substantially parallel to said face surface;

a third surface intersecting said second surface and substantially orthogonal to said face surface; and

a fourth surface intersecting, and being beveled relative to, said third surface.

2. The surface panel of claim 1, wherein the multifaceted side edge further includes a fifth surface parallel to said face and intersecting said fourth surface.

3. The surface panel of claim 2, wherein said fifth surface is said face.

4. The surface panel of claim 1, wherein said first surface is substantially orthogonal to said back surface.

5. The surface panel of claim 1, wherein said surface panel is a ceiling panel for a suspended ceiling.

6. The surface panel of claim 1, wherein said surface panel is a wall panel for an acoustical wall system.

7. The surface panel of claim 1, wherein a height of said third surface is about half of the distance between said second surface and said face surface.

8. The surface panel of claim 7, wherein said distance between said second surface and said face surface is $15/16$ inch, a length of said third surface is about $15/32$ inch and wherein the bevel of said fourth surface is defined by an imaginary triangle having a first side, a second side and a hypotenuse, said first side being coplanar with said third surface and having a length of about $15/32$ inch, said second side having a length, L, in the range of about $1/16$ inch \leq L \leq about $1/2$ inch.

9. The surface panel of claim 7, wherein L is about $1/16$ inch.

10. A surface paneling system including a plurality of surface panels each having a major dimension, a minor dimension and a thickness dimension, a side edge of said panel corresponding to said thickness dimension, a face surface of said panel facing toward a room and being substantially coplanar with a plane defined by said major and minor dimensions, a back surface of said panel being opposite of said face surface, wherein each side edge is multifaceted and includes:

- a first surface intersecting said back surface;
- a second surface intersecting said first surface and substantially parallel to said face surface;
- a third surface intersecting said second surface and substantially orthogonal to said face surface; and
- a fourth surface intersecting, and being beveled relative to, said third surface;

wherein said plurality of panels are arranged in an array in which respective third surfaces abut against each other without intervening framing material; and

wherein, at any two such abutting panels, a triangularly grooved reveal is formed by respective said fourth surfaces due to the beveling such that said array of panels' exhibits a grid of said triangularly grooved reveal.

11. The system of claim 10, wherein said surface paneling system is a suspended ceiling system.

12. The system of claim 11, wherein said surface paneling system is an acoustical wall system.

13. A method of making a surface panel, the method comprising:

providing a surface panel having a major dimension, a minor dimension and a thickness dimension, a side edge of said panel corresponding to said thickness dimension, a face surface of said panel facing toward a room and being substantially coplanar with a plane defined by said major and minor dimensions, a back surface of said panel being opposite of said face surface; and

removing a portion of material at each corner formed between said side edges and said back surface so as to form a multifaceted edge that includes

a first surface intersecting said back surface; and

a second surface intersecting said first surface and substantially parallel to said face surface, said second surface being a bearing surface against which a corresponding bearing surface of a ceiling-mounting or wall-mounting arrangement is to abut;

wherein a predetermined distance is maintained between said second surface and said face surface so as to ensure that said face surface will be said predetermined distance from said bearing surface of said ceiling-mounting or wall-mounting arrangement.

14. The method of claim 13, wherein the multifaceted side edge further includes a fifth surface parallel to said face and intersecting said fourth surface.

15. The method of claim 14, wherein said fifth surface is said face.

16. The method of claim 13, wherein said multifaceted surface further includes:
a third surface intersecting said second surface and substantially orthogonal to said face surface; and

a fourth surface intersecting, and being beveled relative to, said third surface.

17. The method of claim 13, wherein the removal of said portion of material occurs by routing said side edge.

18. The method of claim 13, wherein a height of said third surface is about half of the distance between said second surface and said face surface.

19. The method of claim 18, wherein said distance between said second surface and said face surface is $15/16$ inch, a length of said third surface is about $15/32$ inch and wherein the bevel of said fourth surface is defined by an imaginary triangle having a first side, a second side and a hypotenuse, said first side being coplanar with said third surface and having a length of about $15/32$ inch, said second side having a length, L , in the range of about $1/16$ inch L about $1/2$ inch.

20. The method of claim 19, wherein L is about $1/16$ inch.

21. A reinforced surface panel having a major dimension, a minor dimension and a thickness dimension corresponding to side edges, said panel being laminated wherein the laminae are substantially coplanar with a plane defined by said major and minor dimensions;

said panel having a groove, oriented substantially in said thickness direction, leading from a side edge and extending across said central portion;

said panel including at least one reinforcement rib inserted between two of said laminae such that at least a part of said rib is substantially coplanar with said laminae, said rib extending across a central portion relative to one of said major and minor dimensions;

wherein said reinforcement rib is a T-bar that, in cross-section, has a T shape, a web of said T-bar being located in said groove, a foot part of said T-bar corresponding to the part of said T-bar that is substantially coplanar with said laminae.

22. The reinforced surface panel of claim 21, wherein said web extends out of said groove so as to reach beyond an exterior surface of said panel that is coplanar with said laminae.

23. The reinforced surface panel of claim 21, wherein said T-bar is located in an interior portion of said panel such that said T-bar does not extend out to a peripheral region of said panel.

24. The reinforced surface panel of claim 21, wherein said T-bar is completely inserted into said panel such that an end of said T-bar is at most flush with a side edge of said panel.

25. The reinforced surface panel of claim 21, wherein a side edge of said panel corresponds to said thickness dimension, and wherein a side edge of said panel is hardened relative to an interior portion of said panel so as to connect laminae separated by said rib.

26. The reinforced surface panel of claim 21, wherein a side edge of said panel corresponds to said thickness dimension and a surface lamina that is to be oriented so as to face toward a room is referred to as a face surface, the panel further comprising a layer of material covering said face surface and the side edges of said panel, said material being one of fabric or paintable skim.

27. The reinforced surface panel of claim 21, wherein said surface panel is a ceiling panel for a suspended ceiling.

28. The reinforced surface panel of claim 21, wherein said surface panel is a wall panel for an acoustical wall system.

29. A method of forming a reinforced surface panel, the method comprising:
providing a laminated surface panel having a major dimension, a minor dimension and a thickness dimension, wherein the laminae are substantially coplanar with a plane defined by said major and minor dimensions, and
inserting at least one reinforcement rib between two of said laminae such that at least a part of said rib is substantially coplanar with said laminae, said rib extending across a central portion relative to one of said major and minor dimensions.

30. The method of claim 29, wherein a side edge of said panel corresponds to said thickness dimension, the method further comprising:

forming a groove in said panel, oriented substantially in said thickness direction, leading from a side edge and extending across said central portion;

wherein said reinforcement rib is a T-bar that, in cross-section, has a T shape, a web of said T-bar being located in said groove, a foot part of said T-bar corresponding to the part of said T-bar that is substantially coplanar with said laminae.

31. The method of claim 30, wherein said web extends out of said groove so as to reach beyond an exterior surface of said panel that is coplanar with said laminae.

32. The method of claim 30, wherein said T-bar is ultimately located in an interior portion of said panel such that said T-bar does not extend out to a peripheral region of said panel.

33. The method of claim 30, wherein said T-bar is completely inserted into said panel such that an end of said T-bar is at most flush with a side edge of said panel.

34. The method of claim 29, wherein a side edge of said panel corresponds to said thickness dimension, the method further comprising:

hardening a side edge of said panel relative to an interior portion of said panel so as to connect laminae separated by said rib.

35. The method of claim 29, wherein a side edge of said panel corresponds to said thickness dimension and a surface lamina that is to be oriented so as to face toward a room is referred to as a face surface, the method further comprising:

covering said face surface and the side edges of said panel with a layer of material, said material being one of fabric or paintable skim.

36. The method of claim 29, wherein said surface panel is a ceiling panel for a suspended ceiling.